

REMARKS

Restriction Requirement

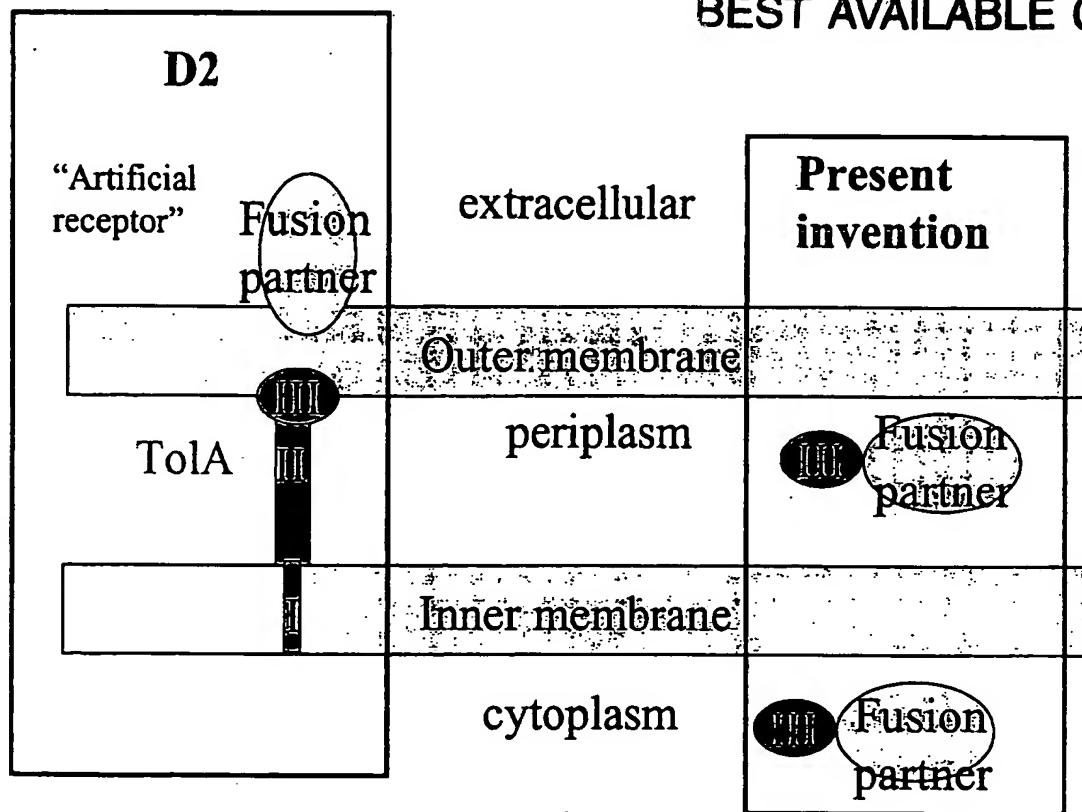
In this supplemental response, Applicant wishes to further explain why the present invention as defined in the pending claims constitutes special technical feature that is not disclosed or suggest by WO 01/21817.

WO 01/21817 relates to a recombinant bacteriophage, pseudoviron or phagemid capable of entering bacteria by specific binding to an artificial receptor (i.e. not dependent on a natural receptor or parts thereof). In an embodiment described at page 7, line 26 to page 8, line 8, WO 01/21817 discloses using TolA “as a fusion partner for the display of bait or prey on the surface of said *E. coli* strains”. In this embodiment, WO 01/21817 states that the TolA-fusion may be at the carboxyl terminal end of TolA.

Applicant respectfully submits that the use of TolA in WO 01/21817 as a fusion partner upon which to add an artificial receptor relies upon largely intact TolA, or at least a TolA protein comprising at least TolA domains I and II. Although it is stated in WO 01/21817 at page 8, lines 1 – 2, that having the TolA-fusion at the carboxyl terminus end of TolA “may result in the deletion of a smaller or larger (*sic*) part of TolA”, a person of ordinary skill in the art would understand that this disclosure would not mean removing domains I and II (i.e. residues 1 – 294 of TolA) because this would result in a cytoplasmic TolAIII which cannot act as the basis for a cell surface receptor required in WO 01/21817 (as shown in the illustration below). The use of the TolA protein as disclosed in WO 01/21817 relies upon surface exposure of the fusion partner attached to a functional TolA protein (or a protein comprising at least TolA domains I, II). To confirm this observation, it is noted that WO 01/21817 discloses in a specific embodiment at page 8, lines 4 – 7, that the “D1-binding domain of TolA has been dleted and replaced by the fusion partner”. The D1-binding domain corresponds to the TolAIII domain (as shown in D1 of IPER (Riechmann & Holliger, 1997)), so this specific

embodiment in WO 01/21817 is a fusion protein lacking the TolAIII domain, but including domains I and II of TolA.

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It is respectfully submitted that Claim 1 as amended recites a fusion polypeptide having a TolAIII domain as the only functional TolA domain, with this TolAIII domain located at or near the N-terminus of the fusion polypeptide and attached to a non-TolA protein partner. The present application provides several examples to support the basic structure of the fusion polypeptide claimed in the amended Claim 1 and depending claims. WO 01/21817 does not provides the suggestion for a skilled artisan to use the TolAIII domain as a fusion partner for improvement of recombinant protein production in s host cell, and certainly provides no suggestion that TolAII domain would have the exceptional properties as a fusion partner demonstrated for the first time as in the present invention.

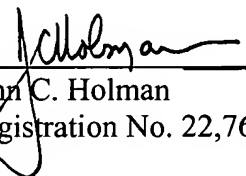
Applicant respectfully submits that the inventions of Group I – VII satisfy the unity of invention requirement under PCT Rule 13.1 and 13.2 because the claims as currently presented contain a special technical feature that defines a contribution over the prior art.

Withdrawn of the restriction requirement, an action on the merits of all of the claims and a Notice of Allowance thereof are respectfully requested.

Respectfully submitted,

JACOBSON HOLMAN PLLC

Date: July 13, 2006
(202) 638-6666
400 Seventh Street, N.W.
Washington, D.C. 20004
JCH/jc
Atty. Dkt. No.: P69705US0

By 
John C. Holman
Registration No. 22,769